

ABSTRACT

SIMULTANEOUS PLANARIZATION OF POLE PIECE AND COIL MATERIALS FOR READ/WRITE HEAD APPLICATIONS

A method for simultaneously planarizing to relatively equal smoothness a thin film
5 magnetic head hardbaked resist structure having relatively low surface energy and one or more
additional thin film magnetic head structures containing other materials having comparatively
higher surface energy, such as copper, hardbaked resist, alumina and NiFe. The method begins
with preparation of a chemical mechanical polishing (CMP) slurry targeted at equaling the
removal rate of the materials to be planarized. The CMP slurry includes a liquid vehicle, an
10 abrasive, and a surfactant. The CMP slurry is applied to the surface of the structures to be
planarized and the structures are simultaneously planarized using a CMP planarization technique.